

REMARKS

Claims 1-59 are pending in this application. Claims 1-20 stand rejected pursuant to one or both of 35 U.S.C. §102 and 35 U.S.C. §103. Claims 21-59 were withdrawn from consideration in view of Applicants' March 3, 2003 response to a February 3, 2003 office action, which required restriction of the application to one of three allegedly distinct inventions.

As indicated above, claims 21-59 are cancelled herein, and both claim 1 and claim 19 are amended. Claims 21-59 are cancelled solely to expedite allowance of this application. By canceling these claims, Applicants do not dedicate their subject matter claims to the public, and do not acquiesce to the Examiner's requirement (as set forth in paragraph #2 of the April 24, 2003 office action) that cancellation of these claims or "other appropriate action" is mandated at this time. Applicants also respectfully reserve the right to seek patent protection for claims that are similar or identical to any or all of claims 21-59 in one or more related applications.

Claim 1 has been amended to incorporate the features of claim 2, which, therefore, has been cancelled. Claim 19 has been amended to recite that in accordance with the claimed method, light is directed substantially perpendicular to a substrate via an optical fiber, and to further recite that the light that is reflected from the substrate is received via the optical fiber.

Claims 1 and 19 are amended solely to expedite allowance of this application. By amending these claims, Applicants do not dedicate the subject matter of originally filed claims 1 and 19 to the public and do not acquiesce to the Examiner's rejection(s) of these claims, nor to the reason(s) offered by the Examiner in support of such rejection(s). Applicants also respectfully reserve the right to seek patent protection for claims that are similar or identical to originally filed claims 1 and 19 in one or more related applications.

The Prior Art Rejections

Claims 1, 10, 19 and 20 are rejected pursuant to 35 U.S.C. §102(b) over U.S. Patent No. 5,223,914 to Auda et al. ("the Auda patent").

Claim 1 of this application has been amended to include the features of claim 2, which was not rejected over the Auda patent in the April 24, 2003 office action. Thus, even assuming, purely for the sake of argument, that the rejections of claims 1 and 10 (wherein claim 10 depends from, and, therefore, includes the limitations of claim 1) over the Auda patent were appropriate, these rejections are now inappropriate and must be withdrawn. Furthermore, claim 19 of this application has been amended to recite an optical fiber, which the Examiner has not indicated is taught or suggested in the Auda patent as claimed herein. Thus, even assuming, purely for the sake of argument, that the rejections of claims 19 and 20 (wherein claim 20 depends from, and, therefore, includes the limitations of claim 19) over the Auda patent were appropriate, these rejections are now inappropriate and must be withdrawn.

Claims 1, 10, 19 and 20 are further rejected – and claims 2-9 and 11-18 are solely rejected - pursuant to 35 U.S.C. §103(a) in view of U.S. Patent No. 6,137,575 to Sugiyama et al. ("the Sugiyama patent). Applicants respectfully traverse these rejections, which Applicants submit are inappropriate.

As indicated above, the thin film thickness measurement apparatus of claim 1 and the thin film measurement method of claim 19 include an optical fiber that guides the light from said light source onto said substrate and guides the reflected light from said substrate to said analyze unit.

Rather than pointing to a prior art reference that discloses or suggests the presence of an optical fiber as recited in apparatus of claim 1, or the usage of an optical fiber as recited in the method of claim 19, the Examiner instead asserts in the instant office action that "an optical fiber to/from substrate [is] notoriously well known in the art, of which Official Notice is taken" and that "it would have been obvious to one of ordinary skill in the art to combine these with the given thickness-measuring at a location, for motivation of more flexibly/completely/rapidly measuring/mapping/characterizing the substrate, at multiple locations."

Applicants submit that in making this assertion, the Examiner has exceeded the permissible scope of Official Notice and, for at least this reason, the 35 U.S.C. §103(a) rejections of claims 1-20 are improper.

As has been held in several cases (e.g., *In re Ahlert*, 165 USPQ 418 (CCPA 1970)), and as is emphasized in MPEP §2144.03, Official Notice should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known such that the facts defy dispute. Applicants submit that it would not be obvious - let alone capable of instant and unquestionable demonstration - to one of ordinary skill in the art to incorporate an optical fiber in connection with either or both the apparatus of claim 1 and/or the method of claim 19.

Thus, Applicants respectfully traverse the Examiner's Official Notice that it would have been obvious to one of ordinary skill in the art to incorporate an optical fiber into the apparatus of claim 1 and into the method of claim 19.

When - as here - the scope of Official Notice has been exceeded, both case law (e.g., *In re Spormann*, 150 USPQ 449 (CCPA 1966) and MPEP §2144.03 require that the Examiner either withdraw the rejection based on improper Official Notice, or produce at least one prior art reference that supports the Officially Noted facts. According further to MPEP §2144.03(C), 37 C.F.R. §1.104(c)(2) and *In re Zurko*, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001), the Examiner must provide documentary evidence - if such evidence exists - in the next Office Action that properly supports the assertion that it would have been obvious for one of ordinary skill in the art to incorporate an optical fiber into the apparatus of claim 1 and the method of claim 19. And if such a reference does not exist, Applicants respectfully request allowance of claims 1 and 19.

Because the 35 U.S.C. §103(a) rejections of claims 1 and 19 are at least partially based on the Examiner's improper Official Notice, such rejections are deemed improper as a whole. Therefore, until/unless the Examiner can substantiate the flawed Official Notice with documentary evidence, Applicants will presume that claims 1 and 19 are allowable over the prior art. And because claims 1 and 19 are allowable, so too are claims 3-18 and 20, each of which depends (either directly or ultimately) from claim 1 or claim 19.

Therefore, the present application is believed to be in condition for allowance, and reconsideration and allowance thereof are respectfully requested.

If the undersigned can be of any assistance in advancing the prosecution of this case, the Examiner is invited to contact him through the information given below.

Date:

July 22, 2003

Respectfully submitted,

By:

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PATENT TRADEMARK OFFICE

Versions of amendments with markings to indicate amended subject matter

Any additions to the amended subject matter are underlined, and any deletions are contained within brackets.

In the Claims

Please cancel claims 21-59 without prejudice.

Please amend claims 1, 2, 6 and 7 of the application as follows:

1. (Amended) A thin film thickness measurement apparatus comprising:
a light source;
an optical fiber;
a light receiving unit for directing light from said light source substantially perpendicular to a substrate and for receiving light reflected from said substrate; and
an analyze unit for analyzing thickness of a thin film of said substrate according to intensity of reflected light received by said light receiving unit,
wherein the optical fiber guides the light from said light source onto said substrate and guides the reflected light from said substrate to said analyze unit.
19. (Amended) A thin film thickness measurement method comprising the steps of:
directing light substantially perpendicular to a substrate via an optical fiber
[and];
receiving light reflected from said substrate via said optical fiber; and
analyzing thickness of a thin film of said substrate according to intensity of said received reflected light.